Staff Evaluation of Water District

District/Agency Name: San Luis Canal Company

A. Review of submitted natural, modified, and constructed water body category designations (Table 1 in district report)

1) Provide the total numbers of submitted and staff-surveyed water bodies for each water body category (staff will conduct a site survey of all B1/B2/M1/M2 water bodies and approximately 10% of C1/C2 water bodies)

Water Body Category	Total # of submitted water bodies	Total # of staff surveyed water bodies
B1	0	0
B2	0	0
M1	2	2
M2	0	0
C1	230	21
C2	0	0

2) List all water bodies surveyed by staff. Attachment A contains site survey photographs.

M1
Poso Slough
Salt Slough*

C1
Belmont Drain
Devon Drain
Boundary Drain No.1
Boundary Drain No.5
Boundary Drain No.5-2
Boundary Drain No.7
Hooper Drain
Boundary Drain
Belmont Drain Cutoff
Poso Drain
San Juan Drain No.3
West Santa Rita Drain
Santa Rita Orchard Ditch
San Juan Drain
Sal Slough Drain
West San Juan Dran
Belmont Drain Extension
Circle Island Drain

Pedro Drain
Panama Canal
Alberti Ditch

Photo documentation of the listed water bodies are provided in Attachment A.

*NOTE: Salt Slough is listed in the Sacramento and San Joaquin River Basin Plan with **no** MUN beneficial use designation. Therefore, no further beneficial use evaluation will be conducted for Salt Slough using this process.

3) Were the district's water bodies listed in a 1992 Inland Surface Water Plan (ISWP) district report? If so, how do the current listings compare to the 1992 listing? Discuss any discrepancy in current water body category designations with the 1992 Inland Surface Water Plan (ISWP).

San Luis Canal Company submitted a report in 1992 and listed approximately 158 district water bodies. Their current listing includes 232 water bodies and many, but not all, of the original 158 water bodies. These differences are most likely due to name changes and more advanced mapping technology. Of the water bodies that match-up between both reports, there was only one under current consideration that was categorized differently – Hooper Drain was categorized in 1992 as a C1 water body (constructed Ag Supply Channel), but is now categorized as a C2 water body (constructed Ag Drain). Staff surveyed Hooper Drain and confirmed that it does currently convey agricultural drainage, and may have been categorized incorrectly in 1992, especially given its name.

4) A comparison to the National Hydrography Dataset (NHD) should be conducted on an applicant's list of water bodies as part of the Flow Chart 1 process. Discuss any findings from staff's review of this comparison. Were there any significant NHD water body feature types that differed from the district's category selection (e.g. NHD layer categorizes a water body as a "Stream/River" but the district categorizes it as a constructed water body)? If so, what supporting evidence is there for the district's selection?

A comparison was conducted between the GIS shape files submitted by San Luis Canal Company and the NHD flowline layer. Less than 30% of San Luis Canal Company's 232 water bodies could be directly compared to the NHD layer. Of these water bodies, staff confirmed a small number that were categorized as C1 (constructed Ag Drain) by the district, but assigned with a "Stream/River" water body type in the NHD layer for part or all of their extent. These water bodies were prioritized by staff when the field survey list was developed (see list of C1 water bodies provided i Question 2 above). Survey findings conducted by staff support the district categorizations.

5) Discuss other pertinent findings that support or do not support district water body category designations. Attach supporting evidence for water body category designations such as site surveys, interviews, and/or photo documentation.

All surveyed water bodies (see Question 2) were found by staff to be constructed or modified for the purpose of conveying or holding agricultural drainage water and support district categorizations. In addition, district representatives showed staff historic records (some dating back to 1930s) depicting construction records for a number of these water

bodies in support of their categorizations. Attachment A contains photos of the water bodies surveyed.

6) Staff Recommendation for Water Body Categorization Designations

__X__ Accept as proposed by district
_____ Change water body category designations as follows:

B. Evaluation of the MUN beneficial use

1) Are there any surface water MUN diversions in the district? If so, indicate the location.

   No, there are no surface water MUN diversions in the district.

2) If the answer was no for the first question, where is the first downstream surface water MUN diversion from the district?

   The first downstream surface water MUN diversion from the district is located at the City of Stockton on the San Joaquin River.

3) Are there any active Water Rights permits or filings for potential future surface water MUN diversions within or downstream of the district and prior to the first MUN diversion? If so, provide the location and any additional information.

   There are no active Water Rights permits or filings for future surface water MUN diversions in SLCC or upstream of the City of Stockton's MUN intake. Additional MUN intakes within the Lower San Joaquin River are unlikely to occur in the future, due to the over-allocation of available flow.

4) Are there any district water bodies that should *not* be designated with their corresponding MUN beneficial use designation from Table 1 MUN Beneficial Use Designations (*table from proposed process*)? If so, explain.

   No. SLCC's water body categorization report and the staff survey information provide evidence that the water bodies were appropriately categorized as C1 or M1 water bodies and have no current MUN diversions. Therefore, the removal of the MUN beneficial use as indicated in Table 1 (using Exception 2b of the Sources of Drinking Water Policy) is appropriate.

B. Evaluation of water quality and monitoring

1) Monitoring Evaluation:

   a. Which monitoring programs conduct water quality monitoring within and/or downstream (to the first MUN intake) of the district?

      San Luis Canal Company is the only entity monitoring within the district. See Attachment B summary table for downstream monitoring programs.

   b. Are there any findings of water quality concerns in or downstream of the district?

      In the most recent Westside San Joaquin River Watershed Coalition ILRP semi-annual report, field and general chemistry constituents such as EC, TDS, *E. coli*, dissolved oxygen, and boron were found exceeding the recommended water quality objectives in Salt Slough. Salt Slough also had exceedances in pesticides such as chlorpyrifos, DDE, DDT, dimethoate, and diuron.

The California 2010 303(d) Integrated report lists portions of the Lower San Joaquin River for boron, chlorpyrifos, DDE, DDT, diazinon, diuron, electrical conductivity, group A pesticides, mercury, selenium, temperature, toxaphene, unknown toxicity, and alpha-BHC/alpha-HCH. Many of these constituents are already being addressed with a TMDL control program.

A one-day synoptic evaluation of drinking water constituents of concern in the Lower San Joaquin River basin, conducted by Central Valley Water Board staff in June 2014, found fifteen constituents with elevated concentrations at one or more sites: pH, specific conductance (SC), turbidity, E. coli, boron, chloride, perchlorate, sodium, sulfate, total dissolved solids (TDS), total aluminum, total iron, total manganese, trihalomethanes, and bis (2-ethylhexyl) phthalate.

c. Are there Best Management Practices (BMPs) in place to address water quality concerns in the district?

The Westside San Joaquin River Watershed Coalition developed a Focused Management Plan for Poso Slough and Salt Slough in September 2011 to identify pollution sources, management practices, and a process to implement management practices.

d. What are the potential data gaps with existing monitoring programs?

2) Staff Recommendation for a Monitoring and Surveillance Program- *Pending*

ATTACHMENT A – STAFF FIELD SURVEY PHOTOGRAPHS OF LISTED WATER BODIES

Poso Slough and Salt Slough

Belmont Drain

Upstream

Downstream

Devon Drain

Upstream

Downstream

Boundary Drain No. 1

Upstream

Downstream

Boundary Drain No. 5

Upstream

Downstream

Boundary Drain No. 5-2

Upstream

Downstream

Boundary Drain No. 7

Upstream

Downstream

Hooper Drain

Upstream

Downstream

Boundary Drain

Upstream-Pipe from Central California Irrigation District

Belmont Drain Cut-off

Upstream

Downstream

Poso Drain

Upstream

Downstream

San Juan Drain No. 3

Upstream

Downstream

West Santa Rita Drain

Upstream

Downstream

Santa Rita Orchard Ditch

Upstream

Downstream

San Juan Drain

Upstream

Downstream

Salt Slough Drain

Upstream

Downstream

West San Juan Drain

Upstream

Downstream

Belmont Drain Extension

Upstream

Downstream

Circle Island Drain

Upstream

Downstream

Pedro Drain

Upstream

Downstream

Panama Canal

 **Upstream**	 **Downstream**

Alberti Ditch

 **Upstream**	 **Downstream**

ATTACHMENT B: Summary of Monitoring Programs I the Lower San Joaquin River

Program	Agency	Monitoring Plan	Project Term	Data in Ceden?	Field	General Chemistry	Organic Carbon	Bacteria/ Pathogen	Metals	Organics	Minerals	Nutrients	Pesticides/ Legacy Chemicals	Toxicity
ILRP (*regulatory*)	Westside SJR Watershed Coalition	WDR	Ongoing	Yes	X	X	X	X	X (TBD)		X	X	X (TBD)	X
			Historic (2006-Feb 2015)	Yes	X	X	X	X	X		X	X	X	X
	East SJ Water Quality Coalition	WDR	Ongoing	Yes									X	
	SJ County and Delta Coalition	WDR	Ongoing	Yes									X	
San Joaquin District Surface Water Monitoring	DWR	San Joaquin River Real-time Water Quality Management Program	Ongoing	No	X									
Interagency Ecological Program		EMP: Real Time Monitoring	Ongoing	No	X									
		EMP: Discrete Water Quality Sampling	Ongoing	No	X	X	X				X	X		
MWQI		MWQI	Ongoing	No	X	X	X		X		X	X		
Continuous Recording Station		Continuous Recording Station	Ongoing	No	X									
SWAMP	CV-Water Board	SJR Monitoring & Supplementary	Historic (1995-2011)	Yes	X	X	X	X	X		X	X		X
		Seasonal Trend Monitoring at Central Valley Integrator Sites	2017 (to be re-evaluated)	Yes	X		X	X						X
	State Water Board	Sediment Pollution Trends (SPoT)	Ongoing	Yes			X		X	X		X	X	X
GBP	DCRT	WDR/Various GBP Plans	Ongoing (some historic)	No	X	X			X			X		

Program	Agency	Monitoring Plan	Project Term	Data in Ceden?	Field	General Chemistry	Organic Carbon	Bacteria/ Pathogen	Metals	Organics	Minerals	Nutrients	Pesticides/ Legacy Chemicals	Toxicity
Surface Water Monitoring	USGS	Surface Water Monitoring	Ongoing	No	X	X			X					
NAWQA		NAWQA	Ongoing	No	X									
Delta Flows Network		Delta Flows Network	Ongoing	No	X									
Surface Water Monitoring	USBR	Surface Water Monitoring	Ongoing	No	X									
Continuous Recording Station		Continuous Recording Station	Ongoing	No	X									
NPDES (*regulatory*)	City of Turlock WWCF	NPDES SMP	Ongoing	No	X	X			X	X	X	X	X	
	City of Modesto WWCF		Ongoing	No	X	X		X	X	X	X	X	X	
	City of Manteca and Dutra Farms		Ongoing	No	X	X			X	X	X	X	X	
	City of Stockton Regional WWCF		Ongoing	No	X	X	X		X	X	X	X	X	
	Stockton Port District Facility		Ongoing	No	X	X		X	X			X	X	X
	Lincoln Center Environmental Remedial Trust		Ongoing	No	X	X			X	X	X	X	X	
	Ironhouse Sanitary District WRF		Ongoing	No	X	X	X		X		X	X	X	
DDW Regulated Monitoring (*regulatory*)	City of Stockton	Title 22 Source Water Monitoring	Ongoing	No	X	X			X		X	X		X
SFEI Regional Monitoring	SFEI	RMP for Water Quality in the SF Estuary	Ongoing	No	X	X	X		X		X	X	X	X